

Abstract of the Disclosure

**METHOD AND APPARATUS FOR CONTROLLING THE CONCENTRATION
RATIO OF REACTANTS IN A FEED-STREAM TO A REACTOR**

In a process for manufacture of a chemical product in which a plurality of individual reactant containing feedstreams are combined to form a mixed feedstream for a reactor (40), and wherein at least one of the plurality of feedstreams (20) is subject to variations in reactant concentration, and another one of the plurality of feedstreams (24) is essentially stable in reactant concentration, a desired ratio of relative reactant concentrations in the mixed feedstream is maintained by a control system which infers a reactant concentration ratio in the mixed feedstream based on process measurements and feed parameters related to the plurality of feedstock containing streams prior to their being combined. In use, flow rate of the feedstream which is essentially stable in reactant concentration is manipulated to maintain the inferred reactant concentrations in the mixed stream.

(Figure. 2)